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| 10/501,624 | 07/15/2004 | Rauno Rantanen | FORSAL-92 | 2220 |
| 36528 | 7590 | 10/05/2005 | EXAMINER | |
| STIENNON & STIENNON 612 W. MAIN ST., SUITE 201 P.O. BOX 1667 MADISON, WI 53701-1667 | | | TADESSE, YEWEBDAR T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1734 | |

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/501,624

Applicant(s)

RANTANEN, RAUNO

Examiner

Yewebdar T. Tadesse

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-32 is/are pending in the application.
- 4a) Of the above claim(s) 25-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 21-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>15/07/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of group I in the reply filed on 07/14/2005 is acknowledged. The traversal is on the ground(s) that the search area would fall in the same area. This is not found persuasive because as recited in paragraph 2 of the restriction requirement for group II the special feature does not define a contribution over Voith Paper Patent GMBH (EP A-1, 209,274). Additionally, the two groups have different US classification (group I –118/355 and group II-427/420), although this case is a 371 of PCT application. Furthermore, burden to the examiner is not limited to the classification of the inventions; it is also limited to the special technical features or divergent subject matters claimed.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 25-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 07/14/2005.

Specification

3. Claims 21-24 are objected to because of the following informalities: In claim 21, line 16 the phrase "the a lowermost edge " has typographic error. Appropriate correction is required. In claim 22, line 19, the phrase "wherein the the second inclined

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surface" has typographic error. In claim 23, lines 18-19, the phrase "a lower end positioned space from" is grammatically incorrect. "a lower end positioned in a space-apart relation from" or "a lower end positioned spaced from" is assumed. In claim 24, lines 10 and 15, the phrases "a first incline direction" and "an incline direction" respectively are typographic errors. "a first inclined direction" and "an inclined direction" are assumed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites (see line 7) the limitation "the outlet opening" in the claim.

There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination "the at least one outlet opening" is assumed.

Claim 21 recites (see line 11) the limitation "the nozzle plate" in the claim. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination "the at least one nozzle plate" is assumed.

In claim 21, lines 15-16 applicant claims, "the cylinder surface is mounted for rotation". It is unclear whether the cylinder surface is used for rotating the moving surface or the applicator rod. Applicant's specification on page 15, lines 22-24 a

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rotating applicator rod is taught. For the purpose of examination "the cylinder surface is mounted for rotation of the applicator rod".

Claim 22 recites (see line 7) the limitation "the outlet opening" in the claim.

There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination "the at least one outlet opening" is assumed.

Claim 22 recites (see line 11) the limitation "the nozzle plate" in the claim. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination "the at least one nozzle plate" is assumed.

Claim 22 recites (see lines 15-16) the limitation "the trailing edge of the first inclined surface" in the claim. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination "the lowermost edge of the first inclined surface" is assumed.

Claim 23 recites (see line 7) the limitation "the outlet opening" in the claim. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination "the at least one outlet opening" is assumed.

Claim 23 recites (see line 11) the limitation "the nozzle plate" in the claim. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination "the at least one nozzle plate" is assumed.

Claim 23 recites (see lines 15-16) the limitation "the trailing edge of the first inclined surface" in the claim. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination "the lowermost edge of the first inclined surface" is assumed.

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Claim 24 recites (see line 7) the limitation "the outlet opening" in the claim.

There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination "the at least one outlet opening" is assumed.

Claim 24 recites (see line 12) the limitation "the nozzle plate" in the claim. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination "the at least one nozzle plate" is assumed.

Claim 24 recites (see line 16) the limitation "the trailing edge of the first inclined surface" in the claim. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination "the lowermost edge of the first inclined surface" is assumed.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/02098 A1 in view of EP 1 2090274 A2 and DE 3333592 A1.

WO'098 discloses an apparatus for feeding a coating agent onto a moving surface comprising: a feed apparatus having at least one feed chamber (3), the feed chamber having at least one inlet opening (borings 18) for the treating agent and at least one outlet opening (borings 20) for the treating agent; at least one nozzle plate 96) having portions forming a plurality of holes (openings 10) which communicate with the at least one outlet opening of the at least one feed chamber, wherein the plurality of holes are arranged to form downwards moving jets of treating agent. WO'098 lacks teaching a first inclined surface receiving the treating agent directly from the holes in the at least one nozzle plate and a second inclined surface receiving the treating agent from the first inclined surface and wherein the lower end of the second inclined plate rests against the moving surface. However, EP'274 discloses (see Figs 3-4 and English translated Abstract) an apparatus for feeding a coating agent onto a moving surface comprising a feeding apparatus (applicator 12) and inclined surface or guide (22, 322, 322) receiving a coating agent from the applicator and rests against the moving surface (U) or the scraping edge lying on the moving substrate. DE'592 discloses (see Figs 1 and 3, particularly see Fig 3) a first downwards sloping inclined surface (9), having a first inclined direction, the first inclined surface positioned to receive the treating agent directly from the holes in the at least one nozzle plate, the first inclined surface forming a downwards sloping flow path on which an even laminar treating agent flow may be formed, the first inclined surface having portions forming a lowermost edge; and a

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second inclined (10) surface having an incline direction opposite to the first inclined direction, the lowermost edge of the first inclined surface being spaced from the second inclined surface so the second inclined surface can receive a laminar flow of treating agent from the first inclined surface and the second inclined surface having a trailing edge which extends to a distance below the feed apparatus and an upper end which extends to the level of or above the lowermost edge of the first inclined surface (see Fig 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a first inclined surface receiving the treating agent directly from the holes in the at least one nozzle plate and a second inclined surface receiving the treating agent from the first inclined surface having the features as claimed in WO'098 to produce an especially thin film as taught by DE'592 (see English translated Abstract). It would have also been obvious to one of ordinary skill in the art at the time the invention was made to include a lower end of the inclined plate rests against the moving surface in WO'098 to scrape or push the coating material along the moving surface.

Allowable Subject Matter

9. Claims 21-23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: As to claim 21, prior art of record does not disclose or suggest an apparatus for feeding a treating agent comprising, among others, at least one downwards sloping surface positioned to receive the downwards moving jets of treating agent and a cylindrical surface mounted for rotating the applicator rod and positioned such that the lowermost edge of the at least one inclined surface rests against the rotating cylindrical surface and wherein the rotating cylindrical surface is in contact with the moving surface. With respect to claim 22, Damrau et al (US 5, 632, 815) discloses (see Figs 1 and 3) adjustment means (72) adjusting the positioning of the blade (40). However, Damrau does not disclose an inclined surface in communication with a nozzle plate. The applicator (20) of Damrau is a dip roll applicator. Prior art of record does not disclose or suggest an apparatus for feeding a treating agent comprising, among others, a first inclined surface receiving the treating agent directly from the holes in the at least one nozzle plate and a second inclined surface receiving the treating agent from the first inclined surface and actuating members connected to the second inclined surface and arranged to move the second inclined surface in the direction transverse to the direction of movement of the moving surface. As to claim 23, Ellermeier et al (US 5,906,865) discloses (see Fig 3) a curtain coating head 27 having a curtain wall (holder 5) with a vacuum line (15). However, Ellermeier et al lacks teaching the wall having a plurality of holes positioned behind the second downwards-sloping inclined surface to suck an air cushion carried by the moving surface into the closed space. Prior art of record does not disclose or suggest an apparatus for feeding a treating agent comprising, among


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others, a first inclined surface receiving the treating agent directly from the holes in the at least one nozzle plate and a second inclined surface receiving the treating agent from the first inclined surface and a wall extending upwardly from the lower end of the second downwards sloping inclined surface forming a closed space and the wall having a plurality of holes positioned behind the second downwards sloping inclined surface to suck an air cushion carried by the moving surface into the closed space.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yewebdar T. Tadesse whose telephone number is (571) 272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM-4: 30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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